

October 13, 1965

Dr. Torbjorn Caspersson
Institute for Cell Research
Karolinska Institutet
Stockholm 60, Sweden

Dear Torbjorn:

You were very kind to suggest my visiting your laboratory, and I agree this could be the most expeditious way to discuss a great many problems. I do regret that present circumstances do not permit me to plan such a visit in the specifiable future; indeed I have no concrete expectations of being away from Stanford for some time.

However, I hope this will not completely obstruct our dialogue, and certainly if you renew your own visits to the U.S. I hope you can be our guest for a hop here.

Meanwhile, I would judge that the theoretical analysis of the "chromogram" $c = c(x)$ for criteria of similarity would not conflict with your own internal experimental plans and we might start some work in this direction - particularly since it is rather analogous to other problems we face in the recognition of chromatograms. If this is so, I would particularly look forward to the publication of the data you had already sent me, so as to provide a tangible target for the mathematical analysis.

The curve-reader is of course merely a convenience for returning data to the computer, but for situations that warrant as much personal evaluation as the chromogram this is an important convenience. A routine schedule in our lab now is that three hours equivalent (after editing) of useful GLC records are read into the LINC computer in 30 minutes. Here the data are processed for base-line correction, scaling, peak selection and integration of area under each peak. All of this is done in the LINC - does not require transfer to the 7090, which would be necessary for more sophisticated programs.

You might well be interested to read our plans for a computer facility at the medical school, so I enclose them. The specified hardware for "ACME" will cost about \$20,000 per month on a lease-basis; the /360-50 is a machine roughly comparable to the 7090, but has enormously more memory and flexibility in multi-access uses. By comparison a LINC such as we have installed could be purchased for \$75,000, more than half of which accounts for the necessary peripheral gear. These costs would seem unreasonable for a single laboratory, but spread over the whole institution they are easy to justify.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

CASPERSSON